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Bonding Surfaces on Concrete

surfaces

TEXTURED CON-TEX CONCRETE REG. U.S. PAT. OFF.

produced by **BONDING CON-TEX**

***—NOT* a bonding paint**

Demonstrating the bonding without ties of a brick to concrete surface treated with Bonding Con-Tex. Brick illustrated was cemented to exposed surface on the 2″ x 8″ edge. Mortar was 1:3. Man weighs 185 lbs.—two men of like size have been supported on outer edge of this brick.

Panel is in New York office of Concrete Surface Corporation. Anyone is invited to make demonstration for themselves.

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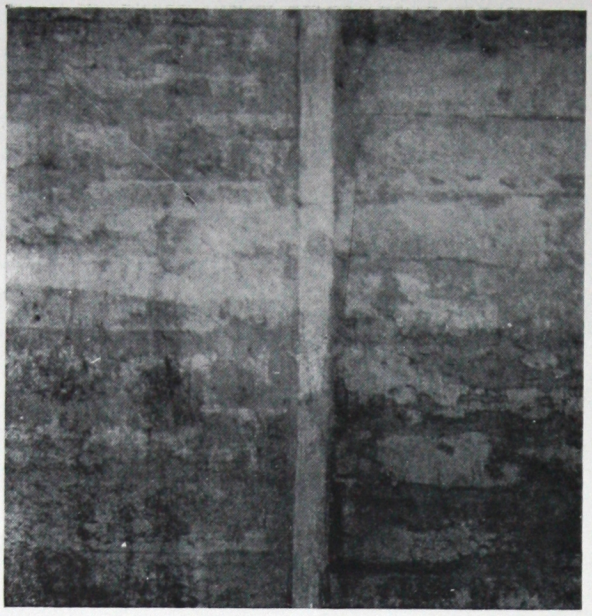
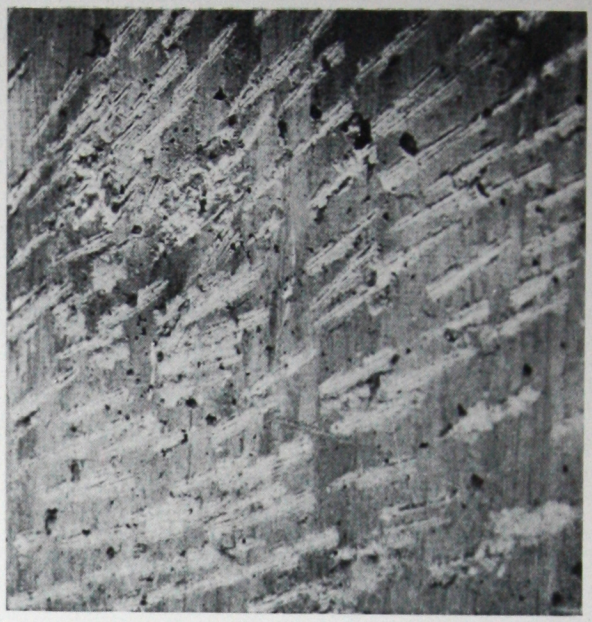
CONCRETE SURFACE CORPORATION

342 MADISON AVENUE, NEW YORK CITY

A. I. A. File No. 21-f
Bonding Surfaces—Con-tex





"Nothing will permanently bond to set and hardened concrete" as illustrated at left. Hacking the surface (right) is both expensive and insufficient.

Bonding Surfaces on Concrete produced by BONDING CON-TEX

BONDING mortar, or stucco, or brick, or stone to concrete or concrete to concrete has long been admitted to be a serious construction problem. Even asphaltic coatings, outwardly sticky as they are, have a questionable attachment to the usual smooth concrete left by the forms and to the top surface of poured slabs.

This over-rich form-skin or top surface was once assumed as the great preserver and benefactor of concrete. But now it is well known that this is far from being the case; and that on the contrary, any surface so rich in cement as is the form-skin or top surface skin, is perpetually thirsty for water; that it therefore is perpetually active; and that being thus active, it constantly changes in nature and in dimension and to such a degree that the permanent retention or adhesion of applied materials of different characteristics is a physical impossibility.

But on the other hand, if this over-rich skin is done away with, all these old-time difficulties are removed from concrete. Getting rid of this covering form-skin to a slight depth necessarily exposes surfaces of clean sand and clean stone, i. e., the embedded aggregates of the concrete. Clean sand and clean stone readily bond with new cement or with plasters, or grouts, or stuccos, or waterproofing coats, whether troweled on or brushed on. And also, a removal of this form-skin gives, incidentally, a mechanical clinch between the aggregate particles which aids materially in the ease of application of other materials to concrete surfaces and adds mechanically an additional security to the clean stone bond, if that were either needful or possible.

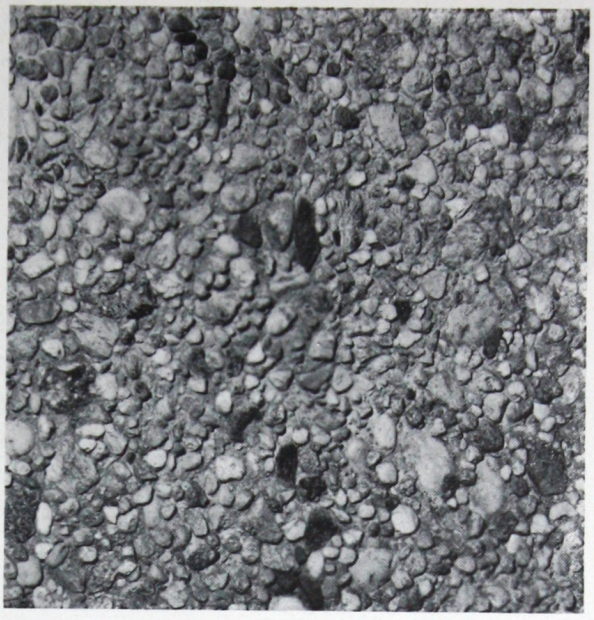
These facts have been aptly summarized in the following words:

"NEW CONCRETE, OR MORTAR, OR PLASTER, OR OTHER APPLIED MATERIALS CANNOT AND WILL NOT PERMANENTLY BOND TO THE SKIN SURFACE OF SET AND HARDENED CONCRETE, BUT ALL MATERIALS WILL UNFAILINGLY BOND TO CLEAN SAND AND CLEAN STONE."

Common evidences of failure to bond

One of the commonest evidences of the truth of these statements is the scaling, the peeling and the cracking-off of finishes applied to concrete structures of all kinds after the forms are stripped, in order to make them presentable. Many an expensive structure has lost a large part of its value because of this failure to bond in even a reasonably permanent degree.

Still another evidence is the leakage of structures that are "bonded" at pouring planes in the



Bush hammering (left) even under ideal conditions is expensive. The aggregate is shattered and the surface cannot compare with the simply obtained Con-Texed surface (right).

ordinary ways, such as roughening with picks, or brooming. Such treatments leave a film of cement over the stone; and this film is sufficient to prevent bond with the concrete next poured; and failure to bond means leakage; and leakage means eventual destruction.

Other evidences of failure to bond are the loosening of top floors from underfloors; the falling of plaster from ceilings and unsatisfactory behaviours to a greater or less extent of all constructions where a new concrete, or a mortar, or a plaster, or a waterproofing coating is applied to the form surface, or skin-surface of set and hardened concrete. These may be seen on every hand, in every locality, and are always difficult and expensive to repair.

Yet these usual difficulties of construction are readily done away with and the character and lasting value of any structure assured if surfaces of clean stone and clean sand, *free of any cement covering*, are produced at the bonding planes, either vertical or horizontal, of concrete constructions.

A Con-Texed bonding surface

Bonding Con-Tex is the agency by which this valuable and necessary result is achieved. Bonding Con-Tex produces a bond surface of clean stone and clean sand on any concrete and at a minimum of cost.

Bonding Con-Tex is a liquid, not acid and not harmful. Although a paint-like material in appearance and although used as a brush coat on the forms or on the fresh concrete, it is not a so-called "Bonding Paint" or "Bonding Coat."

This thin brush-coat of Bonding Con-Tex produces a bond surface by stopping the setting action of a surface film of cement. The Con-Tex coat itself is brushed away when the unset cement and sand in this surface film are removed, exposing the sand and stone beneath, and does not remain on the concrete.

Clean stone and clean sand, firmly held in the concrete first cast, constitute the bonding surface.

How bonding Con-Tex acts

Bonding Con-Tex acts by contacting with concrete while it is in the plastic stage—that is, before the concrete has taken its hard set. By this contact between concrete and Con-Tex, minute amounts of certain elements are slowly fed from the Con-Tex into the surface film of cement that touches the Con-Tex and while it is yet plastic. These elements, controlled by a perfected process of dialysis, stop the setting of a thin surface layer of the concrete to *a definite depth only and no further.*

This leaves the body of the concrete unaffected and hard, firmly holding the aggregate. But at the surface is unset material, which is brushed or washed away, leaving clean stone and clean sand surfaces exposed, free of any cement covering and ready for true bond with any applied materials.

Bonding Con-Tex is easily applied to horizontal forms with a long handled brush—to vertical forms with a short handled brush.

Please note that Con-Tex will not affect set and hardened concrete. This is the surest guarantee that the Con-Tex action will neither proceed beyond the desired limits nor affect the mass as a whole.

Bonding Con-Tex for form work and for top surface work

There are two kinds of Bonding Con-Tex—Bonding Con-Tex for Form Work and Bonding Con-Tex for Top Surface Work.

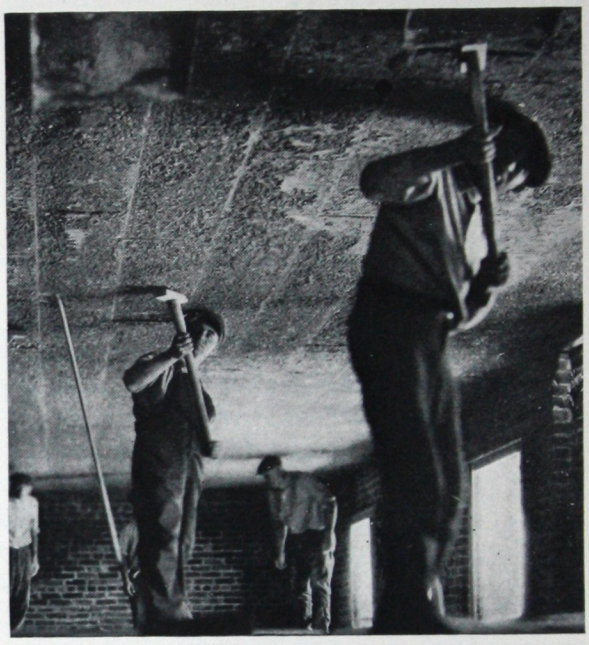
Bonding Con-Tex for Form Work and Bonding Con-Tex for Top Surface Work contain the same elements, but the vehicle carrying them is slightly different. Bonding Con-Tex for Form Work is a hard-film Con-Tex, or in other words uses a vehicle or body which dries hard and is impervious to the weather. For application to top surfaces of concrete itself, a soft-film Con-Tex is used so that the film and the unset material may easily be brushed off after about twenty-four hours from the time of application.

Form Work Bonding Con-Tex is applied directly to the forms well in advance of the work. One full brush coat on the forms is sufficient. It dries quickly; and when dry, will withstand the weather, it can be walked over for the placing of steel and other structural work can be done without damage. Yet the Con-Tex will be responsive to concrete when the forms are filled.

Application of Con-Tex to the forms can be made at any convenient time, either before or after erection.

When placing concrete, *spading should be avoided* as this pushes the stone back from the surface, and stone is required for ideal bonding results. Puddling the concrete makes for uniformity throughout, and is consequently to be recommended.

When the forms are removed, the loose and unset material is removed from the surface of the concrete by brushes, or by a hose stream of proper force. For each reuse of forms, a new coating of Con-Tex must be applied, as it is completely exhausted with each use. If desired, the forms can be reused for plain by omitting the re-coat of Con-Tex.



When the forms are removed, brushing with steel wire brushes easily removes the unset surface film.

Top Surface Bonding Con-Tex is applied directly to the concrete with a brush. It must be applied within two hours after initial set, else the result may be imperfect. About twenty-four hours afterwards, the Con-Tex coat and the unset material are brushed or washed away, leaving the clean aggregate exposed.

In ordering, "Form Work" or "Top Surface Work" should be specified so that the proper variety of Bonding Con-Tex may be shipped.

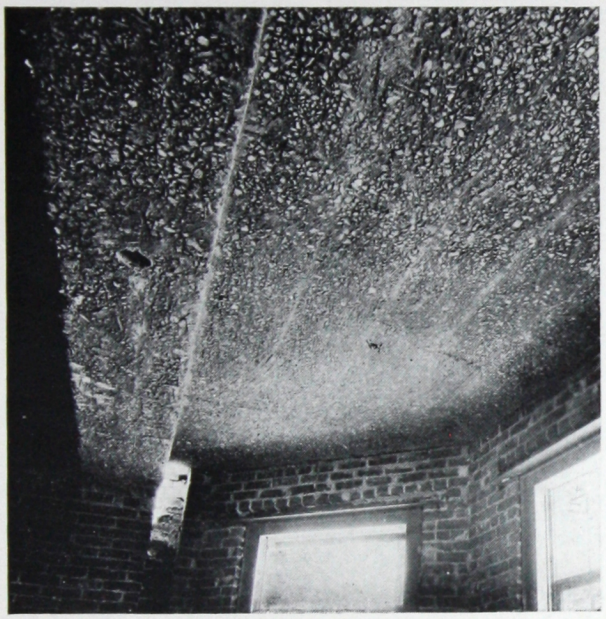
Cost of Con-Texed bonding surfaces

The cost of a Con-Texed bonding surface, either form or top surface work, including labor and material—application of Con-Tex, removal

of unset surface—will vary from about 4 to 6 cents per square foot. Any other method for providing a surface even approaching the Con-Texed surface in bonding efficiently, will cost four to five times these figures.

Covering capacity of bonding Con-Tex

The covering capacity of Bonding Con-Tex for use on forms will approximate 160 square feet per gallon—one application only being required for each use of the form. Top Surface



Con-Texed ceiling ready for plastering. A true, full anchorage bond as permanent as the building.

Bonding Con-Tex, brushed directly onto the concrete surface, will cover approximately 180 square feet per gallon.

*How to specify bonding Con-Tex**

It is best always to specify Bonding Con-Tex by name. The following form is commonly used:*

"All concrete surfaces, whether top surfaces or form-cast surfaces, indicated on the plans to be surface-finished for bond, shall obtain this bonding surface by the use of Bonding Con-Tex as made and supplied by the Concrete Surface Corporation, 342 Madison Avenue, New York City.

"The Bonding Con-Tex shall be used and applied in strict accordance with the manufacturer's directions.

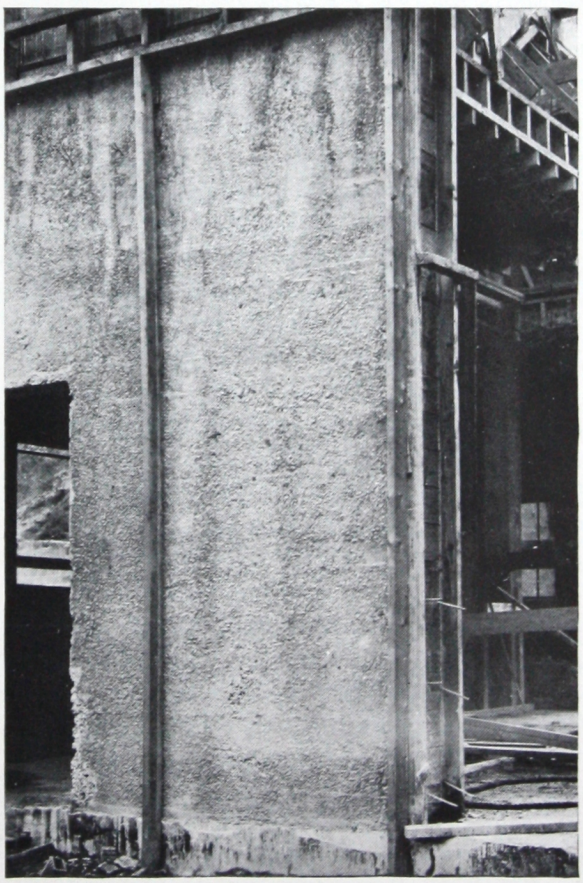
"Forms shall be entirely free from oil or old concrete before applying Bonding Con-Tex.

"For all Form-Cast Surfaces, Form Work Bonding Con-Tex (a *hard film* Con-Tex) shall be brushed on the forms before casting concrete, and for all top surfaces, Top Surface Bonding Con-Tex (a *soft film* Con-Tex) shall be brushed directly on the concrete before hard set has occurred.

"Concrete shall be puddled in place and under no consideration will spading the forms be allowed, as spading takes stone away from the surface.

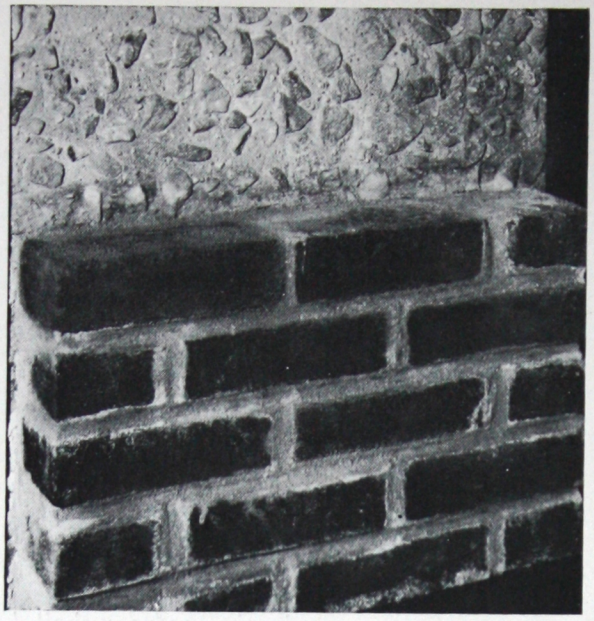
"In form work the Con-Texed surface shall be brushed down or washed down with water or both as soon as forms are removed, so that a clean stone surface of proper reveal is obtained.

"In top surface work, the surfaces shall be wire broomed, or hose washed, or both within 24 hours after placing, and all loosened material shall be removed so that a clean stone surface or proper reveal is obtained."



Vertical bonding surface obtained with Bonding Con-Tex for stucco. No danger of any cracking, peeling or surface blotches on this structure.

*Note: If a trade name may not be used, a public work specification for Bonding Con-Tex will be sent upon request.



Metal ties, awkward to place and to handle, need no longer be used for holding brick, tile, etc., to concrete. The Bonding Con-Texed surface makes them an integral part of the structure with a bond that never rusts.

THE USES OF BONDING CON-TEX.

1. *Bonding of plaster, or stucco, or mortar finish to concrete on all types of structures*

A proper bond surface for plaster on concrete, or for stucco, or for mortar finish over concrete is an absolute necessity.

Surfaces prepared for bond by BONDING CON-TEX afford a maximum of true bond, since by their nature they produce clean stone and clean sand surfaces, to which all plasters and mortars will adhere with a tenacity fully equal to the strength of a one-pour construction.

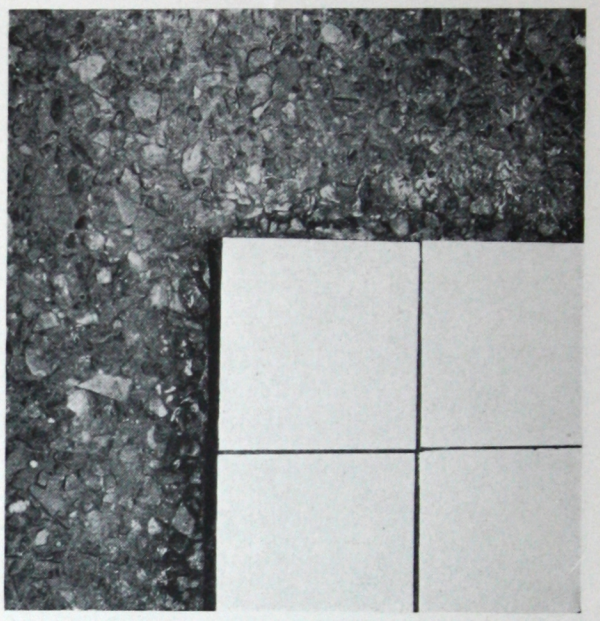
A CON-TEX bond is better than the most painstakingly hand-or-power picked and hacked surface; and by CON-TEX, it is secured with certainty and at a cost *not to exceed the least cost of inferior attempts to accomplish a like result.*

CON-TEX bond surfaces remove all question as to whether or not the concrete has been sufficiently prepared to meet requirements. Plaster goes on CON-TEXED surfaces more easily and surely than *any other surface* without exception. CON-TEXED Bond surfaces make unnecessary the use of "paint coatings" as well as of special bonding plasters.

2. *Elimination of metal ties for bonding brick or stone veneers to concrete*

The old idea that a few pieces of wire or of thin metal, imperfectly protected from corrosion by dipping in a little paint or by galvanizing, will adequately hold masonry veneer to a concrete structure, is one of the curious hold-overs from past ages.

On the other hand, cement mortar itself is known to bond firmly and permanently to brick or stone. All that is needed then, to tie brick or stone to concrete is a *proper bonding surface on the concrete.* Such a surface makes veneering a concrete structure an easy and certain matter.



No hacking or chipping necessary to hold tile to this surface. Simply obtained with one application of Bonding Con-Tex to the forms before placing concrete.

With brick or stone as one unit and a concrete surface prepared by BONDING CON-TEX as the other, the backing mortar ties the two together into a monolithic construction with an adhesion value of over a ton to every five bricks—i. e., per square foot.

No metal ties can begin to equal that value or to approach it in efficiency or low cost. And with BONDING CON-TEX surfaces, there is no longer any question as to placing ties in the right spot, for the whole surface area is a tying surface.

3. *Bonding tile or terra cotta to concrete*

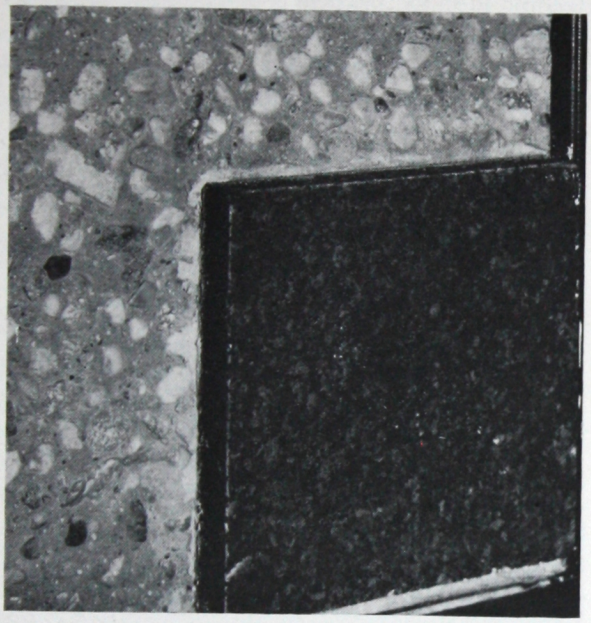
Wherever tile or terra cotta is applied by mortar to the smooth skin surface of concrete, sooner or later there is trouble for the reasons before cited, and even with metal ties.

The remedy is to use a BONDING CON-TEX surface to which the backing mortar will stick

everlastingly and throughout the entire structure.

Swimming pools, building interiors and exteriors, subway stations, and a host of other structures evidence these truths. The service conditions to which such structures are subjected demand the most thorough bond between the tile facing and the concrete structure.

A BONDING CON-TEX surface gives this bond and removes the uncertainty of results that have heretofore made architects, engineers and others



In cold storage structures, the problem of bonding cork to concrete walls and ceilings is solved by Bonding Con-Tex. No separation can occur here between mortar and concrete.

hesitate to use composite constructions of these characters.

4. *Applying cork board to concrete walls*

In the construction of cold rooms, refrigeration chambers and so on, it is customary to set the cork lining in place after forms have been removed. In such work, the bond to the structural concrete must be strong enough to support not only the weight of the cork but also the plaster applied over the cork. In ceilings built in this way, trouble is of especially frequent occurrence, as the weight to be supported is of substantial amount.

This calls for a true bond between the concrete of the structure and the mortar in which the cork is set.

The surface produced by CON-TEXING the concrete makes sure the bonding of the cork

Perspective of horizontal Con-Texed surface ready to receive top mortar finish. Clean sand and clean stone guarantee a sure-fire bond between slab and topping that is integral in the truest sense.

board, as well as the applied plaster, with a large factor of strength to spare over requirements.

5. *Bonding concrete to concrete and top floors to underfloors*

Without BONDING CON-TEX, a reliable and competent contractor, *given a sufficient price*, might possibly be able to prepare the surface of a concrete slab to receive a top flooring and get a true bond. But to have even an approach to a true bond, he must pick and hack and acid wash and clean until he removes the entire top surface and exposes the clean stone and sand of the aggregate, absolutely free from any covering of cement, even a film.

Yet with all this trouble and expense he has obtained only a surface approximating (inferior to) that which might have been obtained inexpensively by using BONDING CON-TEX.

BONDING CON-TEX is just a means to an end—a wonderful tool that secures a clean, fresh surface of concrete aggregates to which new concrete or any plastic material will unfailingly, and surely, and everlastingly bond.

Top Surface BONDING CON-TEX, brushed over the surface of underfloors two or three hours after pouring and finishing, secures this certain bond, reliably and cheaply. A wire brooming and a washing off the next day leaves the clean stone and clean sand surfaces exposed at their

Above shows the concrete and finish coat of curbing parting company under weather action. Con-Tex concrete would have prevented such separation of the finishing coat.

outer faces, and ready to bond *at any time* with new material.

6. *Bonding finishing coats to base coats in steps*

From great stadiums to the humblest of homes, finish-toppings on treads and risers are cracking off and peeling away from the structural concrete beneath.

Top Surface BONDING CON-TEX, spread over treads and Form Work BONDING CON-TEX, painted on riser forms when placing the structural concrete, gives an unfailing clean stone bond that prevents such structural deteriorations. And costs, both for labor and for CON-TEX are negligible.

7. *Bonding curb-finishes to curbings*

Concrete curbings are rapidly becoming standard. But questions as to the advisability of their use are constantly brought up, because of the separation of the finish coat from the cast curb.

Form Work BONDING CON-TEX put on the side forms and Top Surface BONDING CON-TEX brushed over the screeded top surface of the structural, cast concrete remedies this difficulty, surely and satisfactorily and insures integrity and endurance, by giving a monolithic bond in the truest sense between body and finish.

Curbing may also be cast monolithically and surfaced with STANDARD CON-TEX.

8. *Bonding pouring planes to pouring planes*

The life of any concrete exposed to moisture, depends upon its ability to resist the entrance of percolating water with its consequent solvent and softening action.

Disintegration of concrete at and near pouring planes in such structures as dams, reservoirs, tanks, swimming pools, bridges, and in fact, in every kind and class of structure, gives indisputable evidences that the starting point of trouble in most concrete is at and near the pouring planes.

Although the body concrete may be sound and impervious to the infiltration of water, the

The bonding of pouring planes is always important structurally. Serious leakage as shown above often tells the story of the usual failure to bond. A Bonding Con-Tex exposed aggregate surface at joints makes an enduring and water-tight unit of the whole mass.

streaks of muck or "laitance" that occur at the pour lines—material that no stretch of the imagination could call concrete—not only allow water to come through, but invite its entrance. This material dissolves away through water and frost; and the once monolithic mass then becomes a series of loosely laid and unreliable units.

Top Surface BONDING CON-TEX, spread over the top of a lift surface of any properly made concrete, and then removed with the loosened slack material by a hose stream or by wire brooming before the next lift is poured, gives a non-leaking permanently tight joint, that is a

joint in name only, for it is integral at all points.

9. *Bonding together concrete sections at bulkhead joints*

It is not commercially practicable to pour what are designed to be monolithic structures in one pour. Work joints must be made; and there is no actual bond between a pour and the next unless a true, clean-stone bond surface is obtained.

Where it is necessary to make vertical joints in concrete, as at bulkheads, or in such structures as tanks, reservoirs, bridges, dikes, levees, docks, piers, floors, roads, etc., BONDING CON-

Applying Bonding Con-Tex to the vertical bulkheads assures a truly monolithic structure without danger of leakage or separation.

TEX makes possible the preparation of a surface against which new concrete can be poured with full assurance that a true, water-tight bond will be established.

The procedures employed are identical with those before outlined, except that Form Work (hard film) BONDING CON-TEX is applied to the bulkhead form before concrete is poured.

CON-TEX Surfaced bulkhead joints never leak, but no metallic or bitumen joint for concrete has as yet been devised that will not become leaky in time.

Surfacing of these work joints by BONDING CON-TEX, insures a true and unfailing bond with the next pour, and establishes beyond question the monolithic character of the work.

10. *Expansion joints that are watertight*

Mastic fillers of various kinds in expansion joints will not bond to a smooth concrete surface as it comes from forms. This means that such joints are expansion but not contraction joints, for the mastic does not follow when the joint opens; and this failure to follow means that the joint not only does not remain tight, but also that when the joint is open, foreign materials such as dirt or stones get into the joint and spall the concrete by pressure when the joint closes.

But to a concrete surface of clean stone and clean sand, the mastic will bond. Thus bonding to both faces of the joint, the mastic is held in place; and it will give and take as is required, thus maintaining a tight joint at all times.

BONDING CON-TEX on the forms before casting the concrete at expansion joints gives this desirable result at a negligible cost.

11. *Bond for mastic waterproofing*

Asphaltic or mastic waterproofings, when applied to concrete surfaces in sufficient thickness to do any good as water resistants, have a tendency to slough off at one or at many points.

Any such breaking of the film destroys its protective value. For structures such as concrete pickling tanks in steel plants, concrete reservoirs, basement walls, piers, bulkheads

Section through a Con-Texed concrete, showing protective locking of bituminous material to and between the exposed stone, giving permanent protection against water.

Mortar or stucco applied to form cast concrete surfaces without preparation for bond often appears like the illustration at the left in a very short time. Clean sand and clean stone exposed by Con-Tex gives to any concrete an unequalled bonding surface for all plastic building materials, bituminous coatings, etc.

seawalls, etc.,—this has been a very real problem, unsolved until recently.

But if the surface of the concrete is prepared with Bonding Con-Tex, the grip of the protective coating is so strong, both to the clean stone surfaces and between the stones as well, that this tendency to loosen or slide off is eliminated. Even if there be abrasion, as from circulating fluids, or from waves or other causes, the film remains unbroken and the watertightness unimpaired, as the stone itself is not absorbent nor acted upon by the contained fluids.

Bonding Con-Tex surfaces are the surest guarantee for the preservation and continued usefulness of asphalt-coated or mastic-coated concretes that are subjected to water or other destructive action.

12. *Bond for masonry-plaster waterproofing*

The value of this method of waterproofing is dependent upon the applied masonry-plaster becoming and remaining an integral part of any concrete to which such plasters are applied. If water can get through the concrete wall and between this plastered surface and the concrete, it will cause failure by forcing off the plaster in large or small sheets, and the value of the whole job is then imperilled.

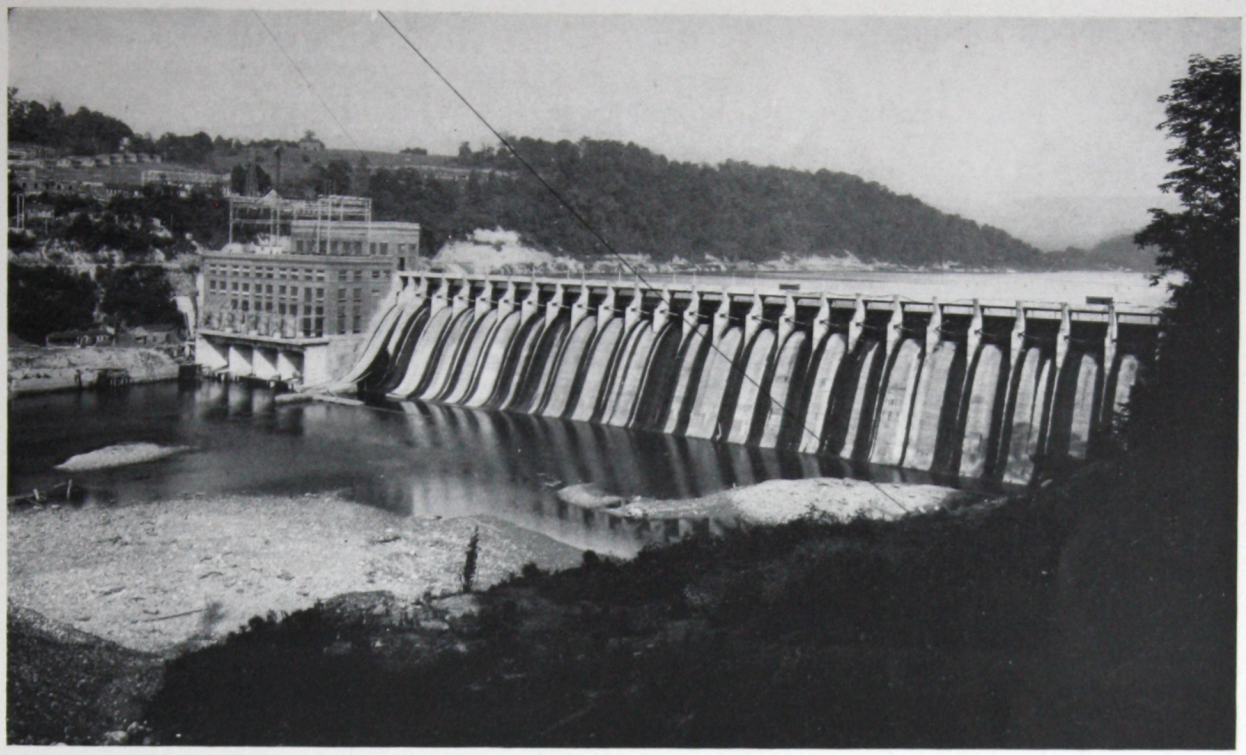
By preparing the surface of the concrete with Bonding Con-Tex, a bonding surface is obtained to which the waterproof plaster will unfailingly and uniformly adhere. And on such a surface, it goes on easily and "stays put." A Con-Tex Bond Surface is the cheapest job insurance in the world, for this, as well as for other classes of work.

13. *Protective coatings applied to concrete in sea water*

A mastic or asphalt coating on concrete piles or concrete dock walls or like structures exposed to sea water has shown value as a protection to the concrete. But its value is only in proportion to its ability to stay with the concrete. It often is worn away by abrasion from waves, or by material carried by the waves, such as sand, or flotsam of various kinds, and destruction then begins.

Such protective coatings will only stick to the smooth surface of form-cast concrete for a limited time. On concrete piles, they come off by scraping in being driven, but they will adhere indefinitely to a pile or other concrete surface that has been thoroughly roughened and prepared by the use of Con-Tex.

A Con-Tex bond surface not only *reduces to about 16% the possible absorptive area* of a concrete exposed to water action, by substituting from 80 to 85% of non-absorbent stone for the usual absorbent full-cement skin and its faculty of "feeding back" this moisture into the mass, but it further goes a long way toward solving the vexatious "sea water problem" in



In this large dam at Cheat Haven, Pa., adjacent sections were bonded one to another with Bonding Con-Tex giving a watertight and permanent joint. Sanderson & Porter of New York were Engineers and Constructors.

concrete of all kinds, by providing a mechanical clinch for the applied protective coat. Such a surface grows better with time, instead of worse, as is the case with plain surfaces.

Sea walls, dams, and other structures are thus rendered practically immune to water action and at a negligible cost.

14. *Bitumen primers on Con-Tex plaster bond surfaces*

Where personal preference is for a bitumen primer on concrete prior to the application of plaster, this may readily be used on a Con-Tex Plaster Bond surface, inasmuch as the mechanical key between the exposed aggregates will suffice to retain the plaster.

A cut-back bitumen should be used for such purposes, rather than a heavy bitumen. The waterproofing value of the cut-back is equally as good as the heavy bitumen on a Con-Texed surface and the clean stone bond is less seriously deteriorated by the thinner material.

However, inasmuch as a Con-Texed surface is over 80% stone on the average, the necessity for waterproofings on such a surface is much less than it is on the old type 100% skin surface, and there cannot be over 20% of the area composed of possibly permeable mortar, through which blotching can occur.

15. *Bonding Con-Tex to prevent sticking*

In many construction operations, steel sheet piling, temporary bulkheads, bolts, bars, etc., etc., must temporarily contact with concrete. But when removal is attempted, it is found most difficult.

Bonding Con-Tex brushed on such members, goes a long way towards aiding such removal. Inasmuch as the surface cement contacting with such members, has not been permitted to set, the usual positive grip is done away with and friction alone needs to be overcome in pulling.

In like manner, Bonding Con-Tex can be used for numberless purposes. For instance, Top Surface Bonding Con-Tex can be used as a coating for sills, to prevent damage from splashing mortar. It can be used to coat outward surfaces of rubble stones, laid up in forms, with poured concrete backing, etc.

Other kinds of Con-Tex

On the following page are listed the various kinds of Con-Tex, with a summary of their fields of use. We would appreciate your cooperation in specifying the use for which Con-Tex is desired on any job, in order that the proper material for that use may be sent.

Concrete Surface Corporation Products—The kinds of Con-Tex and their uses

There is a kind of Con-Tex suited to every concrete surfacing need

THE KINDS OF CON-TEX ARE:

Standard Con-Tex—A hard-film Con-Tex, impervious to weather when dry and for use on forms only. Brushed in an ordinary coat on inside of forms, in advance of pouring the concrete, it gives to concrete surfaces a finish of exposed aggregate, very attractive and as permanent as rock. Made in five grades, depending on the depth of reveal desired. Shipped in one gallon cans only. Covering capacity, first use of forms requiring two applications, 140 square feet per gallon. Each reuse, approximately 175-200 square feet per gallon, and one application only required.

Top-Surface Con-Tex—A soft film Con-Tex for use on top surfaces of concrete. Applied directly to the concrete *before final set*, it gives to concrete an attractive finish of exposed aggregate, free from scaling or cracking. One application only is required. Made in five grades depending on the depth of reveal desired. Shipped in 5 gallon pails and/or in one gallon cans as preferred. Covering capacity approximately 180-200 square feet per gallon. One application only required.

Bonding Con-Tex for Use on Forms—A hard-film Con-Tex, impervious to weather when dry. Brushed on forms in advance of pouring the concrete, and gives a surface of clean sand and stone, exposed at their outer faces as a bonding surface for mortars, plasters, etc., etc., and for attaching tile, brick, cork board, etc., directly to structural concrete without the use of "bonding plasters," "bonding coats," or metal ties. Made in one grade only, giving an adequate reveal. Shipped in 5 gallon pails or in one gallon cans as preferred. Covering capacity 160 sq. ft. per gallon. One application only is needed for each use, including the first use of forms.

Top Surface Bonding Con-Tex—A soft-film Con-Tex for use on top of surfaces of poured slabs. Applied directly to the surface of concrete *before final set*, it gives an exposed surface of clean sand and clean stone for the bonding of floor finishes to underfloors, for bonding one lift of concrete to another; for bonding of column bases to footings; bonding of bituminous or asphaltic toppings to concrete, so that they will not "wave," or slide, and for all like top-surface bonding uses. Made in one grade only, cutting about 3/8". One application only is required. Brushed directly onto the surface of the concrete; removed with the unset cement in about about 24 hours. Covering capacity approximately 180-200 sq. ft. per gallon. Shipped in 5 gallon pails and one gallon cans.

Stucco Con-Tex—A soft-film Con-Tex for exposed aggregate work on stucco so that stucco may have a permanent color (the color of the aggregates used) and a slight texture. Applied directly to the surface of the stucco by brushing on *before final set*. Gives a reveal of about 1/32". Covering capacity about 200 sq. ft. per gallon. Shipped in gallon cans only.

Curex—A full-bodied, creamy liquid, almost colorless, that prevents the usual crazing, cracking, dusting and scaling of all types of concrete surfaces but gives no reveal. Curex is brushed directly on the concrete after finishing. Curex makes unnecessary wetting-down, surface covering or other treatment for concrete surfaces, such as roadways, sidewalks, floors, stucco, cement plasters, concrete products, etc. Shipped only in 5 gallon pails. Covering capacity approximately 180-200 square feet per gallon.

Ask for circular covering product or products in which you are interested, with illustrations of their use

CONCRETE SURFACE CORPORATION
342 Madison Avenue
New York